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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,099	02/20/2004	William L. Tonar	GEN-001324 US2-C1	3531
41890	7590	12/14/2004	EXAMINER	
KING & JOVANOVIC, PLC F/B/O/ GENTEX CORPORATION 170 COLLEGE AVENUE, SUITE 230 HOLLAND, MI 49423			SHAFFER, RICKY D	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/783,099	TONAR ET AL	
	Examiner	Art Unit	
	Ricky D. Shafer	2872	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 48-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 48-53 and 60-64 is/are rejected.
- 7) ☒ Claim(s) 54-59 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 48-53 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynam ('674) in view of Komatsu ('585).

Lynam discloses a variable reflectance rearview mirror for a vehicle comprising a variable reflectance mirror element (31) having a reflectivity that varies in response to an applied potential so as to exhibit at least a high reflectance state and a low reflectance state (see Table A); and at least one protective coating (34) applied to a front surface of said mirror element, wherein the variable reflectance rearview mirror exhibits a high reflectance state to a low reflectance state ratio of greater than approximately 6.5:1.0 (i.e., 34.0:1.0 -see Table A), note Fig. 2 along with the associated description thereof, except for the coating being hydrophilic.

Komatsu teaches it is well known to use a hydrophilic coating of SiO<sub>2</sub> in the same field of endeavor for the purpose of reducing surface reflections and double images and protecting the mirror element from environmental conditions, such as scratches, water and heat.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the protective coating of Lynam to include a hydrophilic coating of SiO<sub>2</sub>, as taught by Komatsu, in order to reduce surface reflections and double images and protect the mirror element from environmental conditions, such as scratches, rain or heat, so as to increase the longevity of the mirror element.

Art Unit: 2872

3. Claims 48-53 and 60-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynam ('674) in view of Komatsu et al ('708).

Lynam discloses a variable reflectance rearview mirror for a vehicle comprising a variable reflectance mirror element (31) having a reflectivity that varies in response to an applied potential so as to exhibit at least a high reflectance state and a low reflectance state (see Table A); and more than one protective coating [(70,72) and (80,82,84)] applied to a front surface of said mirror element, wherein the variable reflectance rearview mirror exhibits a high reflectance state to a low reflectance state ratio of greater than approximately 6.5:1.0 (i.e., 34.0:1.0 -see Table A), note figures 4 and 5 along with the associated description thereof, except for the coating being hydrophilic.

Komatsu et al teaches it is well known to use a hydrophilic coating including a layer of SiO<sub>2</sub>, a photocatalytic layer of TiO<sub>2</sub> and/or a color suppression coating of at least one of TiO<sub>2</sub>, and SiO<sub>2</sub> in the same field of endeavor for the purpose of increasing visibility by removing water drops and protecting the mirror element from environmental conditions, such as ultraviolet ray and corrosion.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the protection coating of Lynam to include a hydrophilic coating including a layer of SiO<sub>2</sub>, a photocatalytic layer of TiO<sub>2</sub> or a color suppression coating of at least one of TiO<sub>2</sub>, and SiO<sub>2</sub>, as taught by Komatsu et al, in order to increase visibility and protect the mirror element from environmental conditions, such as ultraviolet ray and corrosion so as to increase the longevity of the mirror element.

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4. Claims 54-59 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 58 and 59 are objected to because of the following informalities:

In claims 58 and 59, line 2 the language "a high" should be changed to read --said high--.

In claims 58 and 59, line 3 the language "a low" should be changed to read --said low--.

In claims 58 and 59, line 3 the language "only if" should be changed to read --when--.

Appropriate correction is required.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ricky D. Shafer whose telephone number is (571) 272-2320.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RDS

December 10, 2004

*Ricky D. Shafer*  
RICKY D. SHAFER  
2872